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Syphilology

Blood Wassermann—The importance credited to the blood Wassermann reaction in the diagnosis of syphilis is very greatly overestimated by the laity, and also by many physicians. It is very common to hear, "My doctor says this cannot be syphilis because my blood is negative," when we are dealing with an obviously syphilitic lesion, which furthermore clears up under antisyphilitic treatment. The blood Wassermann may be said to be uniformly positive in the early secondary stage of syphilis, in paresis and in congenital syphilis from the second month to the end of the second year. In all other stages the chances are about even; the test will be negative even in the presence of active symptoms.

The following statistics for negative Wassermann tests may be found in the literature: In cardiovascular syphilis Stokes reports 40 per cent; Elliott, 40 per cent; Reid, 17 per cent in fifty-four necropsies; Cumner and Dexter, 25 per cent in thirty-six cases; Longcope, 26.5 per cent negative in forty-seven cases. In gastric syphilis, we find H Schlesinger saying, "A negative Wassermann is very frequent in syphilis of the inner organs." Many authors, as Pick, Eisenklam, Warthim, Neugebauer, Holler, etc., have reported cases with negative reactions. Frequently the diagnosis of gastric syphilis is only apparent after a therapeutic test. In general neurosyphilis Stokes says 40 per cent show a negative blood Wassermann; the same figure is given for tabes after the first decade.

From this one can easily see why the experienced syphilologist places very little importance on a negative blood Wassermann in the diagnosis of syphilis.

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Radiology

The Uses of Lipiodol in Roentgenographic Diagnosis—Until recent years the opaque substances in common use in x-ray laboratories were the barium and bismuth salts in gastro-intestinal examinations, and the iodids and bromids in urological diagnosis. The use of lipiodol for roentgenological diagnosis dates back only to 1921. In that year Sicard and Forestier reported on its use as a means of localizing spinal cord tumors and other obstructions in the spinal canal.

Lipiodol is a vegetable oil containing 40 per cent iodin content by weight and is very opaque to the x-rays, due to the high atomic weight of the iodin. It had previously been used therapeutically as a form of iodin medication, being given in the form of intramuscular injections. Forestier and Sicard accidentally noted that roentgenograms made several weeks later showed opaque spots corresponding to the site of the injection. This finding, together with the known harmlessness of the substance, suggested its use as a means of making the subdural and epidural spaces visible in a roentgenogram.

The use of lipiodol as an aid to roentgenological diagnosis was soon extended from the spinal canal to other regions of the body. Forestier in 1922 devised a suitable technique for making the bronchial tubes roentgenologically visible after intratracheal or intrabronchial injections, although its use for this purpose was not generally adopted until 1924 and 1925. Pritchard, Grady, Archibald, and many others have contributed to our knowledge of the technique of administration and the interpretation of the x-ray findings after its administration.

The method is of especial value in depicting, localizing, and outlining all the bronchial or pulmonary cavities which communicate with the bronchial tree. Small bronchiectatic cavities formerly not seen in the roentgenogram, with this method can be plainly visualized even in areas difficult to examine, such as the retrocardiac region.

Abscesses of the lung are very difficult to render visible at the beginning of their development, but later their detection is easy, especially with the bronchoscope. Besides these the utility of lipiodol should be mentioned in such conditions as occlusion of a bronchus, in the localization of certain non-opaque foreign bodies, of bronchial deviations, bronchopulmonary fistulas, and tumors primary in the bronchus. It is of little aid in diagnosing diseases of the parenchyma of the lung.

Lipiodol has been used with success in the exploration of fistulas and draining sinuses from such delicate tissues as the liver, kidney, and lungs, since it produces no irritation. Furthermore, it is preferable to bismuth paste as it does not occlude drainage.

Intra-arterial injection has resulted in localization of blood vessel obstructions caused by thrombosis or embolism. In the eye, nose, and throat field lipiodol has been used in the examination of the lachrymal ducts and the nasal accessory sinuses.

In the urological field pyelograms and cystograms have been made using lipiodol as the opaque media, although its use is not at all common. Heuser in 1925 was the first to report its use in the field of gynecologic diagnosis. Newell and Jarcho have found the procedure to be of diagnostic value in cases of sterility in which the tubes are obstructed; in such cases it enables one to determine the character and location of the obstruction and whether or not the case is suitable for operation.

When several masses are palpated within the pelvis, the method clearly differentiates the uterus from the other masses. One can also determine whether a pelvic tumor originates from the uterus or ovary, and whether the uterine cavity is encroached on by any tumor masses. Finally chronic appendicitis, right-sided salpingitis, can at times be distinguished from when this method is used.

The chief objection to the use of lipiodol is probably that of its relative high cost, which is

almost prohibitive to free clinics and dispensaries. A number of other substitutes for lipiodol have appeared on the market, but apparently they are not so efficacious nor so harmless.

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Radiology

The Treatment of Carcinoma of the Uterus—For many years there has been a sharp controversy between surgeon and radiologist as to the relative values of surgery and radiation in the treatment of uterine carcinoma. Despite the fact that radiation therapy is really only fifteen years old, reports emanating from various gynecologic clinics in this country and abroad seem to show that radiation gives results which are on a par with surgery. With a view of clarifying the situation, Heyman,[1] an associate of Forssell, presented a statistical survey of surgical and radiological results, before the sixteenth meeting of the Scandinavian Surgical Society at Gothenburg in June of last year. In 1920 the gynecologists of Sweden were so favorably impressed with radiation therapy that they decided to turn over all cases of cervical carcinoma, operable as well as inoperable, to Radium Hemmet for treatment. The report, then, is a compilation of results obtained from this institution, and is divided into sections on cervical carcinoma and fundus carcinoma.

In 5806 cases of carcinoma of the cervix, collected from the world literature, the absolute cures at the end of five years were 20.2 per cent, and as 43 per cent of this number were operable, the relative curability was 35.6 per cent. The primary mortality was 17.2 per cent. A collection of radiological statistics from seventeen sources showed an absolute curability of 16.3 per cent at the end of five years; when the operable and border-line cases were considered, there was a relative curability of 34.9 per cent. From his own material at Radium Hemmet there was an absolute curability of 20.7 per cent. When he took into consideration only the operable cases, which numbered forty-three cases, 62 per cent were living at the end of five years. This is such a high figure that he says it must be accepted with caution, but from it he makes the assertion that radiation as practiced at the Radium Hemmet is superior to surgery in cervical carcinoma.

Heyman likewise analyzed the literature on the operative results in cancer of the fundus. He found these to be 42.8 per cent for the absolute, and 58.8 per cent for the relative. This study showed that the oft-quoted statement that "eighty per cent of the fundus carcinomas that were operated on were cured" is based on a report of only ten cases. The radiological literature is very incomplete; in fact, there are no available statistics except from their own institution, so he reports on forty-six cases that have been under observation for the conventional five-year period. The absolute curability in these was 43.5 per cent, and the relative curability in the operable class was 60 per cent.

The survey, as far as Radium Hemmet is concerned, shows that radiation is superior to surgery in both the cervical and fundus carcinomas. Anyone interested in cancer should read the original article. The technique of radical surgery of the pelvic organs has long been established and can hardly be improved upon; that of radiation, on the other hand, is in its infancy. Possibly as time goes on this may be so perfected that the ultimate results will be far better than they are today. Oftentimes one speculates as to the final outcome in a combination of surgical procedures with radiation. Stevens,[2] reporting on his results, combined electrocoagulation with radiation in eighty-two cases; 42.5 per cent of these were operable and 27 or 32.7 per cent were well at the end of five years.

The difficulty in comparing radiological with surgical material lies in the fact that the surgical reports are based on patients with a relatively high operability, while radiologic material shows so many more advanced cases that the operable cases are far in the minority. In other words, the initial material is essentially different and must be borne in mind while making comparisons. Different observers report on such a varied assortment of cases that one cannot help but feel that in some localities adequate lay education on cancer has brought patients to the clinic earlier than in others. Statistics at the best are dull and uninteresting, but in the final analysis the proper treatment must take into proper consideration a study of this kind.

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Flat Foot—Statistics compiled from the draft during the recent World War have been often quoted, and have thrown much light upon remediable conditions in persons of the draft age in the United States and elsewhere.

This great emergency revealed the large number of men unfit for mental or physical strain, who were yet able to plod along doing their daily civilian tasks. The number of countries with a republican form of government has increased since the war. Government then, on the whole, is better for the average man since this calamity. If the health of the population of America improves along the lines indicated to be necessary by draft figures, another benefit from the war will be established. However, there is no assurance that this is occurring.

"Among the first million men to be mobilized during the World War, one rachitic deformity, flat foot, was found to be practically as frequent (one hundred and seventy per thousand) as all other diseases and deformities combined (one hundred and eighty per thousand)."

Recent statistics from colleges and naval recruiting stations indicate a prevalence of flat foot still in the population today. Examination of school children in Oregon showed that less than ten per cent were entirely free from it.—*Southern M. J.*